AMENDMENTS TO THE CLAIMS

1. (Currently amended) In a computer system comprising a server machine and a client machine, a text-to-speech synthesis method comprising:

describing a finite number of possible acoustic units;

optimizing a compression method selected in dependence of said finite number of possible acoustic units, wherein said optimizing step further comprises selecting parameters of said compression method utilizing a directed optimized search to minimize the amount of data transmitted between said server machine and said client machine;

compressing said finite number of possible acoustic units via said optimized compression method;

storing said finite number of possible acoustic units as compressed acoustic units in an acoustic unit database accessible to said server machine;

in said server machine, obtaining a normalized text and generating prosody data thereof;

selecting from said acoustic unit database compressed acoustic units that correspond to said normalized text;

transmitting said prosody data and said selected compressed acoustic units from said server machine to said client machine; and

in said client machine, decompressing said transmitted acoustic units and concatenating said decompressed acoustic units in accordance with said prosody data.

2. (Previously presented) The method of claim 1, wherein

said decompressing step and said concatenating step begin before all of said selected compressed acoustic units and said prosody data are received in said client machine.

3. (Previously presented) The method of claim 1, further comprising:

caching a number of frequently used uncompressed acoustic units in a cache memory of said client machine; and

concatenating said decompressed acoustic units with at least one of said uncompressed acoustic units.

4. (Original) The method of claim 1, further comprising normalizing a standard text to obtain said normalized text.

5. (Previously presented) The method of claim 1, further comprising:

sending a standard text to said server machine;

in said server machine, normalizing said standard text to obtain said normalized text.

6. Cancelled.

7. (Currently amended) The method of claim ~~6~~ 1, wherein said optimized search is directed by an acoustic metric that measures quality.

8. (Previously presented) The method of claim 1, wherein said describing step further comprises:

dividing each of said possible acoustic units into sequences of chunks of equal duration; and

describing frequency composition of each chunk with a set of parameters.

9. (Currently amended) In a computer system comprising a server machine and a client machine, a text-to-speech synthesis method comprising:

in said server machine, obtaining a normalized text;

selecting compressed acoustic units corresponding to said normalized text from a database storing a predetermined number of possible acoustic units that have been optimally compressed;

transmitting said selected compressed acoustic units to said client machine;

generating prosody data corresponding to said normalized text and transmitting said prosody data to said client machine;

in said client machine, decompressing said transmitted acoustic units; and

concatenating said decompressed acoustic units.

10. Cancelled.

11. (Original) The method of claim 9, further comprising normalizing a standard text to obtain said normalized text.

12. (Previously presented) The method of claim 9 wherein said decompressing step and said concatenating step begin before all of said selected compressed acoustic units are received in said client machine.

13. (Previously presented) The method of claim 9, further comprising:

determining a compression method in dependence of said predetermined number of possible acoustic units; and

selecting parameters of said compression method utilizing an optimized search directed by an acoustic metric that measures quality to minimize the amount of data transmitted to said client machine while maintaining a minimum acoustic quality for each of said possible acoustic units.

14. (Previously presented) The method of claim 9, further comprising:

caching a number of frequently used uncompressed acoustic units in a cache memory of said client machine; and

concatenating said decompressed acoustic units with at least one of said uncompressed acoustic units.

15. (Currently amended) In a client machine, a text-to-speech synthesis method comprising:

a) receiving compressed acoustic units corresponding to a normalized text from a server machine, said compressed acoustic units being selected from a predetermined number of possible acoustic units and compressed using a compression method selected in dependence on said predetermined number of possible acoustic units;

b) decompressing said compressed acoustic units to obtain decompressed acoustic units; ~~and~~

c) receiving prosody data corresponding to said normalized text from said server machine; and

d) concatenating said decompressed acoustic units in dependence of said prosody data.

16. Cancelled.

17. (Original) The method of claim 15 wherein step (c) further comprises concatenating said decompressed acoustic units with at least one cached acoustic unit.

18. (Original) The method of claim 15 further comprising, before step (a), transmitting a standard text corresponding to said normalized text to said server machine.

19. (Original) The method of claim 15 further comprising, before step (a), normalizing a standard text to obtain a normalized text, and transmitting said normalized text to said server machine.

20. (Previously presented) The method of claim 15, further comprising:

selecting parameters of said compression method to minimize the amount of data transmitted to said client machine while maintaining a minimum acoustic quality for each of said possible acoustic unit.

21. (Previously presented) The method of claim 20, further comprising:

utilizing an optimized search directed by an acoustic metric that measures said minimum acoustic quality.

22. (Currently amended) The method of claim 15 wherein steps (b), ~~and~~ (c), and (d) occur before step (a) is completed.

23. (Previously presented) A text-to-speech synthesis system programmed to perform the method of claim 1, said text-to-speech synthesis system comprising:

said acoustic unit database;

said server machine in communication with said acoustic unit database; and

said client machine in communication with said server machine.

24. (Previously presented) A text-to-speech synthesis system programmed to perform the method of claim 9, said text-to-speech synthesis system comprising:

said acoustic unit database;

said server machine;

said client machine; and

means for enabling data transmission and communication among said acoustic unit database, said server machine, and said client machine.

25. (Previously presented) A text-to-speech synthesis system programmed to perform the method of claim 15, said text-to-speech synthesis system comprising:

an acoustic unit database for storing said predetermined number of possible acoustic units;

said server machine in communication with said acoustic unit database;

said client machine in communication with said server machine; and

means for enabling data transmission and communication among said acoustic unit database, said server machine, and said client machine.

26. (Previously presented) The system of claim 25, wherein said client machine further comprises:

means for normalizing a standard text to obtain said normalized text; and

means for transmitting said normalized text to said server machine.

27. (Previously presented) The system of claim 25, wherein said client machine further comprises:

means for receiving said compressed acoustic units;

means for decompressing said compressed acoustic units; and

means for concatenating said decompressed acoustic units.

28. (Previously presented) The system of claim 25, wherein said client machine further comprises:

a cache memory for caching at least one uncompressed acoustic unit.

29. (Previously presented) The system of claim 25, wherein said server machine further comprises:

means for normalizing a standard text to obtain said normalized text, wherein said standard text is received from said client machine or a different source, or is generated by said server machine.

30. (Previously presented) A computer-readable program storage device tangibly embodying a computer-executable program implementing the text-to-speech synthesis method of claim 1.

31. (Previously presented) A computer-readable medium storing a computer-executable program implementing the text-to-speech synthesis method of claim 9.

32. (Previously presented) A computer-readable medium storing a computer-executable program implementing the text-to-speech synthesis method of claim 15.

33. (Previously presented) A computer-readable medium storing a computer-executable program implementing the text-to-speech synthesis method of claim 19.

34. (Previously presented) A computer-readable medium storing a computer-executable program implementing the text-to-speech synthesis method of claim 20.

35. (Previously presented) A computer-readable medium storing a computer-executable program implementing the text-to-speech synthesis method of claim 21.